COUNTY OF LOS ANGELES

Department of Agricultural Commissioner/ Weights and Measures

Kurt E. Floren
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Director of Weights and Measures

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Richard K. Iizuka
Chief Deputy

DATE: September 15, 2015

TO: Supervisor Michael D. Antonovich, Mayor, Fifth District
Supervisor Hilda L. Solis, First District
Supervisor Mark Ridley-Thomas, Second District
Supervisor Sheila Kuehl, Third District
Supervisor Don Knabe, Fourth District

FROM: Kurt E. Floren
Agricultural Commissioner
Director of Weights and Measures

SUBJECT: **GOLDSPOTTED OAK BORER DETECTED IN LOS ANGELES COUNTY**

An infestation of Goldspotted Oak Borer (GSOB – *Agrilus auroguttatus*) has been discovered in oak trees, in the Green Valley area. A specimen collected August 19 was confirmed through DNA analysis on August 28, 2015. GSOB is a non-native invasive beetle that has killed an estimated 80,000 oak trees in San Diego County since its original detection there in 2004. Infestations have also been identified in the community of Idyllwild in Riverside County and the Weir Canyon area in Orange County. Scientists believe the insect was transported to San Diego County via oak firewood from a range in southeastern Arizona. GSOB adult emergence occurs from May to September, creating a critical need to identify potentially infested trees in the early months of the year to reduce spread of adult GSOB into healthy trees.

During their larval stage, GSOB extensively feeds in the outer phloem and cambial layer, obstructing water and nutrient uptake and, eventually, causing the oak trees to die. In addition to financial burdens from removal and replacement of dead trees, widespread oak mortality can ecologically impact wildlife through loss of a vital source of food and habitat. Dead trees can also create greatly increased fuel, exacerbating already dry and dangerous wildfire conditions.

To date, no chemical or pesticidal control has proven effective at eliminating this pest or stopping its spread. Public awareness, through outreach and education, is key to preventing expanded infestations. Through the County of Los Angeles Fire Department, a press release is forthcoming to urge residents to use firewood only from local sources and to not transport firewood to cabins, campgrounds, or parks. Additional educational material, including the attached pest fact sheet, will be prepared and distributed in order to ensure an informed public to assist in this effort to limit spread of GSOB.

Attachment

c: Sachi Hamai, Interim Chief Executive Officer
Patrick Ogawa, Acting Executive Officer
Sheila Williams, Senior Manager, Executive Office
Board Deputies

Goldspotted Oak Borer
(Agrilus aurogutattus)

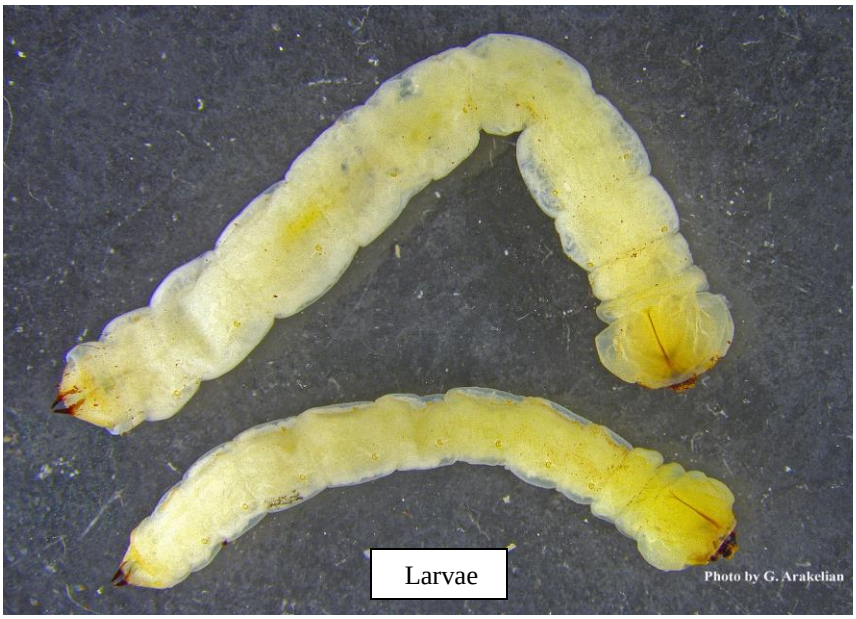
Adult (dorsal view)

Adult (lateral view)

Distribution: Goldspotted oak borer (GSOB) is native to southeastern Arizona and Mexico (Baja California). In recent years it was discovered in several counties of southern California. GSOB is close related to *A. coxalis* which is spread from central Mexico to Guatemala.

Field ID: Adult (about 10 mm) has dark metallic green body with six golden yellow spots on the elytra and two on thorax. Females are larger than males.

Larvae are yellowish-white, legless, and about 18 mm long when fully grown. First segment of thorax is conspicuously flattened and expanded. Tip of the abdomen with two pincher-like spines. Spiracles are crescent-shaped. Pupae resemble adults and are white, with soft bodies.



Larvae

D-shaped exit holes

Larval galleries

Oaks killed by GSOB

Hosts and damage:
Attacks various oaks and was recorded on coast live oak *(Quercus agrifolia)*, California black oak *(Q. kelloggii)*, canyon live oak *(Q. chrysolepis)*, Engelmann oak *(Q. engelmannii)*, silverleaf oak *(Q. hypoleucoides)*, and Emory oak *(Q. emoryi)*.

Larvae bore into main stems and some branches of host trees and injure the phloem and outer xylem. Mature larvae can often be located in the outer bark where they are bent in hairpin shape preparing for pupation.

Adults emerge by chewing D-shaped exit holes in the bark. They feed on oak leaves, but cause just a minor, insignificant damage. GSOB typically completes one generation in a year.

Heavily infested trees display crown thinning and gradually die over several years under continuous attacks by numerous GSOB generations.